

Mike Blevins
Executive Vice President
& Chief Nuclear Officer
Mike.Blevins@Luminant.com

Luminant Power P O Box 1002 6322 North FM 56 Glen Rose, TX 76043

T 254 897 5209 C 817 559 9085 F 254 897 6652

CP-200800701 Log # TXX-08071

Ref. # 50.73(a)(2)(iv)(A)

May 12, 2008

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555

SUBJECT:

COMANCHE PEAK STEAM ELECTRIC STATION

DOCKET NO. 50-446

ACTUATION OF REACTOR PROTECTION SYSTEM

LICENSEE EVENT REPORT 446/08-001-00

REFERENCE:

Dear Sir or Madam:

Enclosed is Licensee Event Report (LER) 08-001-00 for Comanche Peak Steam Electric Station (herein referred to as Comanche Peak Nuclear Power Plant) Unit 2, "Reactor Trip Due to a Sheared Condenser Vacuum Instrument Sensing Line."

This communication contains no new licensing basis commitments regarding Comanche Peak Nuclear Power Plant (CPNPP) Unit 2.

U. S. Nuclear Regulatory Commission TXX-08071 Page 2 05/12/2008

Sincerely,

Luminant Generation Company LLC

Mike Blevins

By: Fred W. Madden

Director, Oversight & Regulatory Affairs

Enclosure

E. E. Collins, Region IV c-

B. K. Singal, NRR

Resident Inspectors, Comanche Peak

Enclosure to TXX-08071

| NRC FOF | RM 366 | 1 | U.S | S. NUCLEAR F | REGULA | TORY CO | MMISSI | Of APPR | OVED BY OMB | NO. 3150-0 | 0104 | | EXPIRES | 8: 8/31/2010 | |
|--|---|---|--|---|--|--|--|---|--|---|---|---|--|--------------------------------|--|
| (9-2007) | | | | | | Estima reques | Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing | | | | | | | | |
| | | | | | | proces the R | request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection. | | | | | | | | |
| | LICE | NSEE | EVENI | REPORT | (LER) | | | infocol Regula | atory Commissio lects@nrc.gov, | n, Wasning and to th ⊏∩R-1020 | gton, DC ne Desk | 20555-0001, Officer, Offi | or by interi ce of Infor | net e-mail to rmation and | |
| | (5 | See revers | e for requ | ired number of | : | | | Budge | t, Washington, I | DC 20503. | ک (۱۳۵۵- ۱ If a mo مطابع valid | eans used to | impose an | n information | |
| | | | | or each block) | | | | not co | collection does not display a currently valid OMB control number, the NHC may not conduct or sponsor, and a person is not required to respond to, the information collection. | | | | | | |
| 1. FACILI | ITY NAMI | | | | ***** | | . 12 | | CKET NUMB | ER | ₹2 | | 3. PAGE | | |
| COMA | NCHE | PEAK N | UCLEA | R POWER F | PLANT | UNIT 2 | | 0500 | 00446 | <u>.</u> | | | 1 1 | OF 4 | |
| 4. TITLE Reactor | r Trip Di | ue to a S | Sheared | Condenser | Vacuu | m Instrun | nent S | ensina L | ine | | | | | | |
| | Reactor Trip Due to a Sho | | 6. LER NUMBER | | | 7. REPORT DATE | | | | | | OLVED | | | |
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REV NO. | MONTH | DAY | YEAR | FACILITY NAME N/A | FACILITY NAME DOCUMENT | | | IT NUMBER | | |
| 03 | 16 | 2008 | 2008 | 001 | 00 | 05 | 12 | 2008 | FACILITY NAI | ME | | | DOCUMEN 05000 | IT NUMBER | |
| 9. OPER | ATING M | ODE | 11. | THIS REPOR | T IS SUI | IBMITTED P | URSUA | NT TO TH | IE REQUIREN | MENTS O | F 10 CF | R &: (Che | k all that | annlv) | |
| Mode 1 | | | | 2201(b) | | 20.2203(| | | |)(2)(i)(C) | | | 3(a)(2)(vii | | |
| | | | ! = | 2201(d) | | 20.2203(| | | _ |)(2)(ii)(A) | | | 3(a)(2)(vii | | |
| | | | | 2203(a)(1) 2203(a)(2)(i) | H | 20.2203(a 50.36(c)(| | | 50.73(a) |)(2)(ii)(B))(2)(iii) | | | 3(a)(2)(vii 3(a)(2)(ix) | | |
| 10. PO\ | WER LEV | EL | | 2203(a)(2)(ii) | \Box | 50.36(c)(| | | |)(2)(iv)(A) |) | _ | 3(a)(2)(x) | , | |
| 100% | | | | 2203(a)(2)(iii) | | 50.36(c)(| | | _ |)(2)(v)(A) | | | 1(a)(4) | | |
| | | | i— | 2203(a)(2)(iv) | | 50.46(a)(| | | |)(2)(v)(B) | | 73.7 | 1(a)(5) | | |
| | | | | 2203(a)(2)(v) | | 50.73(a)(| | | |)(2)(v)(C) | | OTH | | - CD | |
| | | | | 2203(a)(2)(vi) | | 50.73(a)(| 2)(I)(D) | | |)(2)(v)(D) | | VOL | JNTARY L | LEH | |
| 12. LICENSEE CONTACT FOR THIS LER | | | | | | | | | | | | | | | |
| FACILITY | NAME | | | | | CENSEE C | ONIAC | | iio eeii | 1 | TELEPH | ONE NUMBE | B (Include | Area Code | |
| FACILITY | NAME | | | ope – Nucle | ar Lice | nsing Ma | ınager | | | | (254) | ONE NUMBE 897-6370 | R (<i>Include i</i> | Area Code) | |
| | | | 3. COMP | LETE ONE LIN | ar Lice NE FOR | nsing Ma | nager MPONEI | NT FAILU | RE DESCRIB | ED IN TH | (254) IIS REP | 897-6370 ORT | 1 | | |
| CAUSE | SYSTE | | | | ar Lice NE FOR | ensing Ma | ınager | NT FAILU | | | (254) IIS REP | 897-6370 | REPO | Area Code) ORTABLE O EPIX | |
| | | | 3. COMP | MANU- | ar Lice NE FOR | ensing Ma | nager MPONEI | NT FAILU | RE DESCRIB | ED IN TH | (254) IIS REP | 897-6370 ORT MANU- | REPO | ORTABLE | |
| | SYSTE | M COM | IS. COMP | MANU- | ear Lice NE FOR REPOR TO E | ENSING MA | nager MPONEI | NT FAILU | RE DESCRIB | ED IN TH | (254) IIS REP | 897-6370 ORT MANU- | REPO | ORTABLE | |
| CAUSE | SYSTE | 14. SUPF | IPONENT | MANU- FACTURER AL REPORT E | ear Lice NE FOR REPOR TO E | ENSING MA | nager MPONEI CAUS | NT FAILU | RE DESCRIB SYSTEM 15. EXPE SUBMIS | ED IN TH | (254) IIS REP | 897-6370 ORT MANU- FACTUREF | REPO TO | ORTABLE O EPIX | |
| CAUSE YE | SYSTE | 14. SUPF | PLEMENT EXPECTE | MANU- FACTURER AL REPORT E | ear Lice NE FOR REPOR TO E | ENSING MA EACH COM ITABLE EPIX ED X NO | nager MPONEI CAUS | NT FAILU | RE DESCRIB SYSTEM 15. EXPE SUBMIS DATE | ED IN TH | (254) IIS REP | 897-6370 ORT MANU- FACTUREF | REPO TO | ORTABLE O EPIX | |
| CAUSE YE | SYSTE | 14. SUPF | PLEMENT EXPECTE | MANU- FACTURER AL REPORT E | ear Lice NE FOR REPOR TO E | ENSING MA EACH COM ITABLE EPIX ED X NO | nager MPONEI CAUS | NT FAILU | RE DESCRIB SYSTEM 15. EXPE SUBMIS DATE | ED IN TH | (254) IIS REP | 897-6370 ORT MANU- FACTUREF | REPO TO | ORTABLE O EPIX | |
| CAUSE YE ABSTRA | SYSTE S (If yes, o | 14. SUPF | PLEMENT EXPECTE Spaces, i.e. | MANU- FACTURER AL REPORT ED SUBMISSION D., approximated The process of the pro | REPORTO E EXPECTION DATE Nuclean | EACH COM | nager MPONEI CAUS typewrit | NT FAILU E ten lines) | RE DESCRIB SYSTEM 15. EXPE SUBMIS DATE | ED IN THE COMPO | (254) IIS REP DINENT | MANU- FACTUREF | DAY | ORTABLE O EPIX YEAR | |
| CAUSE YE ABSTRA | SYSTE S (If yes, o | 14. SUPF complete 15 to 1400 s 16, 2008 1137 ho | PLEMENT EXPECTE spaces, i.e. Grant Commanders, the | MANU- FACTURER AL REPORT E ED SUBMISSION , approximate nche Peak N Unit 2 Main | REPORTO E EXPECTION DATE Nuclean Turbin | ED IN NO RIGHT POWER P | typewrit | ten lines) | 15. EXPE SUBMIS DATE | ECTED SION | (254) IIS REP DINENT | MANU- FACTUREF | DAY | ORTABLE O EPIX YEAR | |
| CAUSE YE ABSTRA On pow Tur | SYSTE S (If yes, a CT (Limit March ver. At bine trip | 14. SUPF complete 15 to 1400 s 16, 2008 1137 ho | PLEMENT EXPECTE spaces, i.e. Comai urs, the dan auto | AL REPORT E SUBMISSION C., approximate The Peak N Unit 2 Main Domatic reaction | REPOR TO E XPECTI DATE) Nuclear Turbin or trip. | ED IN NO Representation of the property of t | typewrit Caus Plant (C due to ol rods | ten lines) CPNPP) a sensefully ins | 15. EXPE SUBMIS DATE | ECTED SION In Mode ondense all three | e 1 opeer vacie Auxilia | MANU- FACTUREF MONTH | DAY | ORTABLE O EPIX YEAR | |
| CAUSE YE ABSTRA On pow Tur pun | SYSTE S (If yes, a CT (Limit March ver. At bine trip | 14. SUPF complete 15 to 1400 s 16, 2008 1137 ho o caused ted as e | PLEMENT EXPECTE spaces, i.e. Comai urs, the dan auto | MANU- FACTURER AL REPORT E ED SUBMISSION , approximate nche Peak N Unit 2 Main | REPOR TO E XPECTI DATE) Nuclear Turbin or trip. | ED IN NO Representation of the property of t | typewrit Caus Plant (C due to ol rods | ten lines) CPNPP) a sensefully ins | 15. EXPE SUBMIS DATE | ECTED SION In Mode ondense all three | e 1 opeer vacie Auxilia | MANU- FACTUREF MONTH | DAY | ORTABLE O EPIX YEAR | |
| CAUSE YE ABSTRA On pow Tur pun rea | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps stai ctor trip | 14. SUPF to 1400 s 16, 2008 11,37 ho caused ted as e | PLEMENT EXPECTE Spaces, i.e. Grant and the compact of the compact | AL REPORT E SUBMISSION a., approximate nche Peak N Unit 2 Main matic react as a result | REPORTO E SEXPECTION UNDERSTORM TO E SEXPECTION UNDERSTORM TURBIN Of the | ENSING MA EACH COM ITABLE PIX ED IX NO IGNORMATION IN THE INTERPRETATION IN THE INTERP | typewrite to oli rods | ten lines) EPNPP) a sense fully ins | 15. EXPE SUBMIS DATE Unit 2 was ed loss of conserted, and as responded | ED IN THE COMPOSITION SION SION SION SION SION SION SION S | e 1 ope er vaci e Auxili | MANU- FACTUREF MONTH erating at uum and ary Feeding and fo | DAY 100% he Mainwater llowing t | ORTABLE O EPIX YEAR | |
| CAUSE YE ABSTRA On pow Tur pun rea The | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps stai ctor trip | 14. SUPF to 1400 s 16, 2008 11,37 ho caused ted as e | PLEMENT EXPECTE Spaces, i.e. 3, Comai urs, the d an auto expected | AL REPORT E SUBMISSION C., approximate The Peak N Unit 2 Main Domatic reaction | REPORTO E SEXPECTION OF TO BE TO B | ED RICHARDLE EPIX NO Gle-spaced r Power Pee tripped All contri reactor tri on vacuu | typewrit Caus Plant (C due to ol rods ip. All | ten lines) CPNPP) a sense fully inssystems | 15. EXPE SUBMIS DATE Unit 2 was ed loss of conserted, and as responded sensing line | ED IN THE COMPOSION SION SION SION SION SION SION SION | e 1 ope er vaci e Auxili lly duri | MONTH Perating at Jum and ary Feeding and for Condense | DAY 100% he Mainwater llowing to | ORTABLE O EPIX YEAR the | |
| CAUSE YE ABSTRA On pow Tur pun rea The the con | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps stai ctor trip e cause sensing nbinatio | 14. SUPF complete 15 to 1400 s 16, 2008 11,37 ho caused ted as e | PLEMENT EXPECTE Spaces, i.e. 3, Comai urs, the d an auto expected event wa ing designal street | MANU- FACTURER AL REPORT E ED SUBMISSION D., approximate Inche Peak N Unit 2 Main Dimatic react I as a result s a sheared gned and insess induced | REPORTO E EXPECTION JUNE 15 Sin Nuclear Turbin or trip. of the commistalled by con | ED T Power Poet tripped All contrareactor tri Ton vacuu without and adenser means and a second a second and | typewrite Plant (C due to ol rods ip. All im instituted and inovernite in a control of the cont | ten lines) CPNPP) a sense fully ins systems rument is flexible ent and | 15. EXPE SUBMIS DATE Unit 2 was ed loss of corred, and so responded sensing line ality. The facyclic stress | in Mode ondense all three on the lilure was due to | e 1 ope er vaci e Auxili lly duri | MONTH Practing at any Feeding and for condense ately the ion. Imm | DAY 100% he Main water llowing to r 2B due result of ediate | ORTABLE O EPIX YEAR the | |
| CAUSE YE ABSTRA On pow Tur pun rea The the con cor | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps star ctor trip e cause sensing nbinatio rective a | 14. SUPF omplete 15 to 1400 s 16, 2008 1137 ho caused ted as e of this e g line be n of resi | PLEMENT EXPECTE Spaces, i.e. 3, Comainurs, the dan autoexpected expected event was ing designed dual strencluded | MANU- FACTURER AL REPORT E D SUBMISSION A., approximate Inche Peak N Unit 2 Main Inmatic react I as a result s a sheared gned and insess induced repair of the | REPORTO E SXPECTION OF TO B TO B SXPECTION OF TO B TO | ED T Power Poet tripped All contractor tripped and wacuu without and adenser med vacuu | typewrite Plant (C) due to ol rods ip. All im inst dequal novement | ten lines) CPNPP) a sense fully ins systems rument se flexible ent and rument se | 15. EXPE SUBMIS DATE Unit 2 was ed loss of coserted, and as responded series in the factorial series in the factorial series sensing line sensing l | in Mode ondense all three donormal stothed illure was due to and me | e 1 ope er vacte Auxili Main C is ultimo vibratodifica | MONTH Practing at Jum and ary Feeding and for condense lately the ion. Immition of the | DAY 100% he Main water llowing to result of ediate esuppor | ORTABLE O EPIX YEAR the to a | |
| CAUSE YE ABSTRA On pow Tur pun rea The the con cori | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps star ctor trip e cause sensing nbinatio rective a | 14. SUPF omplete 15 to 1400 s 16, 2008 1137 ho caused ted as e g line be n of resi actions i 1 and 2 | PLEMENT EXPECTE Spaces, i.e. 3, Comainurs, the lan autoexpected expected expected and dual strending designed as a complex to the complex to | MANU- FACTURER AL REPORT E D SUBMISSION A., approximate Inche Peak N Unit 2 Main matic react I as a result s a sheared gned and insess induced repair of the glines. The | REPORTO E SXPECTION OF TOP OF TOP TOP TOP TOP TOP TOP TOP TOP | ENSING MA EACH CON TABLE EPIX FD TY TY TY TY TY TY TY TY TY T | typewrite Plant (C) due to ol rods ip. All im instite dequal novements im instite point fa | ten lines) CPNPP) a sense fully ins systems rument : e flexibilent and rument : illure vui | The DESCRIBE SYSTEM 15. EXPE SUBMIS DATE Unit 2 was ed loss of conserted, and as responded series in the factoric stress sensing line inerability with the sensing line in the sensing line in the sensing line inerability with the sensing line in the sensing line in the sensing | in Mode ondense all three of normal state to the lilure was due to and me as reme | e 1 ope er vacte Auxili Main C is ultimo vibratodifica | MONTH Practing at Jum and ary Feeding and for condense lately the ion. Immition of the | DAY 100% he Main water llowing to result of ediate esuppor | ORTABLE O EPIX YEAR the to a | |
| CAUSE YE ABSTRA On pow Tur pun rea The the con cor on t tent | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps star ctor trip ctor trip cause sensing nbinatio rective a the Unit th refue | 14. SUPF complete 15 to 1400 s 16, 2008 1137 ho caused ted as e gline be n of resi actions i 1 and 2 ling outa | PLEMENT EXPECTE Spaces, i.e. Commandation Expected | AL REPORT E SOURCE AL REPORT E CONTROL A | REPORTO EXPECTION (DATE) Nuclear Turbin or trip. of the stalled by concession passive noved of the stalled of | ED | typewrit Plant (C) due to ol rods ip. All im instidequal novements coint fa | ten lines) a sense fully inservement see flexible ent and rument silure vuithe nex | The DESCRIB SYSTEM 15. EXPESUBMIS DATE Unit 2 was ed loss of conserved, and as responded serving line stress sensing line and the refueling of the refueling of the systems of the refueling of the systems of the sys | in Mode ondense all three donormal state to the lilure was state to and measurement outage. | e 1 ope er vacte Auxili Main C is ultimo vibratodifica | MONTH Practing at Jum and ary Feeding and for condense lately the ion. Immition of the | DAY 100% he Main water llowing to result of ediate esuppor | ORTABLE O EPIX YEAR the to a | |
| CAUSE YE ABSTRA On pow Tur pun rea The the con cor on t tent | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps star ctor trip ctor trip cause sensing nbinatio rective a the Unit th refue | 14. SUPF complete 15 to 1400 s 16, 2008 1137 ho caused ted as e gline be n of resi actions i 1 and 2 ling outa | PLEMENT EXPECTE Spaces, i.e. Commandation Expected | MANU- FACTURER AL REPORT E D SUBMISSION A., approximate Inche Peak N Unit 2 Main matic react I as a result s a sheared gned and insess induced repair of the glines. The | REPORTO EXPECTION (DATE) Nuclear Turbin or trip. of the stalled by concession passive noved of the stalled of | ED | typewrit Plant (C) due to ol rods ip. All im instidequal novements coint fa | ten lines) a sense fully inservement see flexible ent and rument silure vuithe nex | The DESCRIB SYSTEM 15. EXPESUBMIS DATE Unit 2 was ed loss of conserved, and as responded serving line stress sensing line and the refueling of the refueling of the systems of the refueling of the systems of the sys | in Mode ondense all three donormal state to the lilure was state to and measurement outage. | e 1 ope er vacte Auxili Main C is ultimo vibratodifica | MONTH Practing at Jum and ary Feeding and for condense lately the ion. Immition of the | DAY 100% he Main water llowing to result of ediate esuppor | ORTABLE O EPIX YEAR the to a | |
| CAUSE YE ABSTRA On pow Tur pun rea The the con cor on t tent | SYSTE S (If yes, of CT (Limit March ver. At bine trip nps star ctor trip ctor trip cause sensing nbinatio rective a the Unit th refue | 14. SUPF complete 15 to 1400 s 16, 2008 1137 ho caused ted as e gline be n of resi actions i 1 and 2 ling outa | PLEMENT EXPECTE Spaces, i.e. Commandation Expected | AL REPORT E SOURCE AL REPORT E CONTROL A | REPORTO EXPECTION (DATE) Nuclear Turbin or trip. of the stalled by concession passive noved of the stalled of | ED | typewrit Plant (C) due to ol rods ip. All im instidequal novements coint fa | ten lines) a sense fully inservement see flexible ent and rument silure vuithe nex | The DESCRIB SYSTEM 15. EXPESUBMIS DATE Unit 2 was ed loss of conserved, and as responded serving line stress sensing line and the refueling of the refueling of the systems of the refueling of the systems of the sys | in Mode ondense all three donormal state to the lilure was state to and measurement outage. | e 1 ope er vacte Auxili Main C is ultimo vibratodifica | MONTH Practing at Jum and ary Feeding and for condense lately the ion. Immition of the | DAY 100% he Main water llowing to result of ediate esuppor | ORTABLE O EPIX YEAR the to a | |

NRC FORM 366 (9-2007) PRINTED ON RECYCLED PAPER

NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION (9-2007)LICENSEE EVENT REPORT (LER) CONTINUATION SHEET 1. FACILITY NAME 2. DOCKET 6. LER NUMBER 3. PAGE SEQUENTIAL NUMBER YEAR REV COMANCHE PEAK NUCLEAR POWER PLANT UNIT 2 2008 OF 4 05000 - 446 001 00

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

I. DESCRIPTION OF THE REPORTABLE EVENT

A. REPORTABLE EVENT CLASSIFICATION

10CFR50.73(a)(2)(iv)(A); "Any event or condition that resulted in manual or automatic actuation of any of the systems listed in paragraph (a)(2)(iv)(B)."

B. PLANT OPERATING CONDITIONS PRIOR TO THE EVENT

On March 16, 2008, CPNPP Unit 2 was in Mode 1, operating at 100% power.

C. STATUS OF STRUCTURES, SYSTEMS, OR COMPONENTS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

There were no structures, systems, or components that were inoperable at the start of the event that contributed to the event.

D. NARRATIVE SUMMARY OF THE EVENT, INCLUDING DATES AND APPROXIMATE TIMES

On March 16, 2008, CPNPP Unit 2 was in Mode 1 operating at 100% power. At 1123 hours, Operators (utility, licensed) in the Unit 2 control room received alarms that indicated Main Condenser B vacuum [EIIS: (SH)(COND)] was less than 24 inches on Channels 1, 2 and 3 and slowly trending down. By verifying alternate indications, the Operators found that condenser vacuum was actually stable at 28 inches. At 1137 hours, Operators received an automatic "low vacuum" trip on the Main Turbine [EIIS: (TA)(TRB)]. The turbine trip initiated an automatic reactor trip. All control rods fully inserted, and all three Auxiliary Feedwater pumps [EIIS: (BA)(P)] started as expected as a result of the reactor trip. All systems responded normally during and following the reactor trip.

E. THE METHOD OF DISCOVERY OF EACH COMPONENT OR SYSTEM FAILURE, OR PROCEDURAL OR PERSONNEL ERROR

Operators (utility, licensed) in the Unit 2 Control Room received alarms that indicated Main Condenser B vacuum was less than 24 inches on Channels 1, 2 and 3 and trending down.

II. COMPONENT OR SYSTEM FAILURES

A. FAILURE MODE, MECHANISM, AND EFFECT OF EACH FAILED COMPONENT

Not applicable - there were no component failures associated with this event.

B. CAUSE OF EACH COMPONENT OR SYSTEM FAILURE

Not applicable - there were no component failures associated with this event.

C. SYSTEMS OR SECONDARY FUNCTIONS THAT WERE AFFECTED BY FAILURE OF COMPONENTS WITH MULTIPLE FUNCTIONS

Not applicable - there were no component failures associated with this event.

NRC FORM 366A

(9-2007)

U.S. NUCLEAR REGULATORY COMMISSION

CONTINUATION SHEET

| CONTINOATION CHEET | | | | | | | | |
|--|-------------|---------------|----------------------|------------|----|------|--|--|
| 1. FACILITY NAME | 2. DOCKET | 6. LER NUMBER | | | 3. | PAGE | | |
| | | YEAR | SEQUENTIAL NUMBER | REV NO. | | | | |
| COMANCHE PEAK NUCLEAR POWER PLANT UNIT 2 | 05000 - 446 | 2008 | 001 | 00 | 3 | OF 4 | | |

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

D. FAILED COMPONENT INFORMATION

Not applicable - there were no component failures associated with this event.

III. ANALYSIS OF THE EVENT

A. SAFETY SYSTEM RESPONSES THAT OCCURRED

Both Motor Driven Auxiliary Feedwater Pumps and the Turbine Driven Auxiliary Feedwater Pump started as expected as a result of the reactor trip.

B. DURATION OF SAFETY SYSTEM TRAIN INOPERABILITY

Not applicable - there was no safety system train inoperability that resulted from this event.

C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

This event is bounded by the CPNPP Final Safety Analysis Report (FSAR) accident analysis which assumes conservative initial conditions which bound the plant operating range and other assumptions which reduce the capability of safety systems to mitigate the consequences of the transient.

This event is bounded by the analysis of the turbine trip presented in Section 15.2.3 of the CPNPP FSAR. The analysis uses conservative assumptions to demonstrate the capability of pressure relieving devices and to demonstrate core protection margins. The event of March 16, 2008, occurred at 100 percent reactor power, and all systems and components functioned as designed.

Based on the above, it is concluded that the health and safety of the public were unaffected by this condition and this event has been evaluated to not meet the definition of a safety system functional failure per 10CFR50.73(a)(2)(v).

IV. CAUSE OF THE EVENT

The cause of this event was a sheared common vacuum instrument sensing line to the Main Condenser 2B due to the sensing line being designed and installed without adequate flexibility. The failure was ultimately the result of a combination of residual stress induced by condenser movement and cyclic stress due to vibration.

As a part of the Turbine Generator (TG) Protection System Reliability Digital Upgrade Project, the existing TG mechanical hydraulic control system was replaced with a new digital control system during the eleventh refueling outage on Unit 1 and the ninth refueling outage on Unit 2. A common vacuum source to each Main Condenser shell was installed to supply three transmitters with a 2/3 trip logic. This resulted in a passive single point failure vulnerability for a loss of the common sensing line. During this event, loss of the Main Condenser shell B common sensing line due to inadequate flexibility and high vibration caused all three transmitters to sense a low condenser vacuum, and this led to a low vacuum trip on the Main Turbine and an automatic reactor trip.

NRC FORM 366A

(9-2007)

U.S. NUCLEAR REGULATORY COMMISSION

4 OF 4

CONTINUATION SHEET

| | 2. DOCKET | (| 3. PAGE | | | | | |
|--|-----------|------|----------------------|------------|--|--|--|--|
| | | YEAR | SEQUENTIAL NUMBER | REV NO. | | | | |

001

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

1. FACILITY NAME

COMANCHE PEAK NUCLEAR POWER PLANT UNIT 2

V. CORRECTIVE ACTIONS

Immediate corrective actions included repair of the sheared vacuum instrument sensing line and modification of the supports on the Unit 1 and 2 sensing lines to add flexibility to the lines. These support modifications reduced the bending moments, which in turn reduced the chronic stresses that led to the failure of the sensing line on March 16, 2008.

05000 - 446

To reduce the probability of similar events occurring in the future, the passive single point failure vulnerability was addressed on Unit 2 during the tenth refueling outage by removing the common line and installing separate sensing lines to the transmitters. As a part of this modification, the condenser pipe segments were also modified to reduce vibration.

As a part of the CPNPP Corrective Action Program, a similar modification to remove the common line and install separate sensing lines will also be performed on the Unit 1 Main Condensers during the next refueling outage. Engineering will issue a lessons learned on this event and will also review other similar passive single point failure vulnerabilities in both units.

VI. PREVIOUS SIMILAR EVENTS

There have been no previous similar reportable events at CPNPP in the last three years.